



Martin M-130 China Clipper in Hong Kong

This is a historical work.

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China Clipper – Floatplanes Of Pan Am

These flying boats had a beginning and an end. That beginning was the dream-become-reality of Juan Terry Trippe, an American commercial aviation pioneer, entrepreneur and the founder of Pan American World Airways, one of the iconic airlines of the 20th century. He was instrumental in numerous revolutionary advances in airline history, including the development and production of the Sikorsky S-42, Martin M-130 and Boeing B-314 Clippers, which opened trans-Pacific airline travel.

PAN AM HISTORICAL FOUNDATION



Portrait of Juan Trippe done by Akimoto for the San Diego Hall of Fame 1982

While this book will primarily cover the flying-boat airplanes, a brief history of Juan Trippe is essential to understanding how they came about.

Juan Terry Trippe was born in Sea Bright, New Jersey, on June 27, 1899, the great-great-grandson of Lieutenant John Trippe, captain of the USS Vixen. Because he was named "Juan", he is widely assumed to have been of Hispanic descent, but his family was actually Northern European in ancestry and settled in Maryland in 1664. He was named after Juanita Terry, the Venezuelan wife of his great uncle.

Trippe attended the Bovea School and graduated from The Hill School in 1917. He enrolled at Yale University but left when the United States entered World War I to apply for flight training with the United States Navy. After completing training in June 1918, he was designated as a Naval Aviator and was commissioned as an Ensign in the United States Navy Reserve.

However, the end of World War I precluded him from flying in combat. Demobilized from active duty, he returned to Yale, graduating in 1921. While there, Trippe was treasurer at the first meeting of the National Intercollegiate Flying Association in 1920.

After graduation from Yale, Trippe began working on Wall Street, but soon became bored. In 1922 he raised money from his old Yale classmates, selling them stock in his new airline, an air-taxi service for the rich and powerful called **Long Island Airways**.

Once again tapping his wealthy friends from Yale, Trippe invested in an airline named **Colonial Air Transport**, which was awarded a new route and an airmail contract on October 7, 1925. Interested in operating to the Caribbean, Trippe created the **Aviation Corporation of the Americas**. Based in Florida, the company would evolve into the unofficial United States flag carrier, **Pan American Airways**, commonly known as Pan Am.

Pan Am's first flight took off on October 19, 1927, from Key West, Florida, to Havana, Cuba, in a hired Fairchild FC-2 floatplane being delivered to **West Indian Aerial Express** in the Dominican Republic.

The return flight from Havana to Key West, in a Pan Am Fokker F.VII, took place October 29, being delayed from October 28 by rain. Later, Trippe bought the **China National Aviation Corporation** (CNAC) to provide domestic air service in the Republic of China, and became a partner in **Panagra** (Pan American-Grace Airways). In the 1930s, Pan Am became the first airline to cross the Pacific Ocean with the famous **China Clipper**.

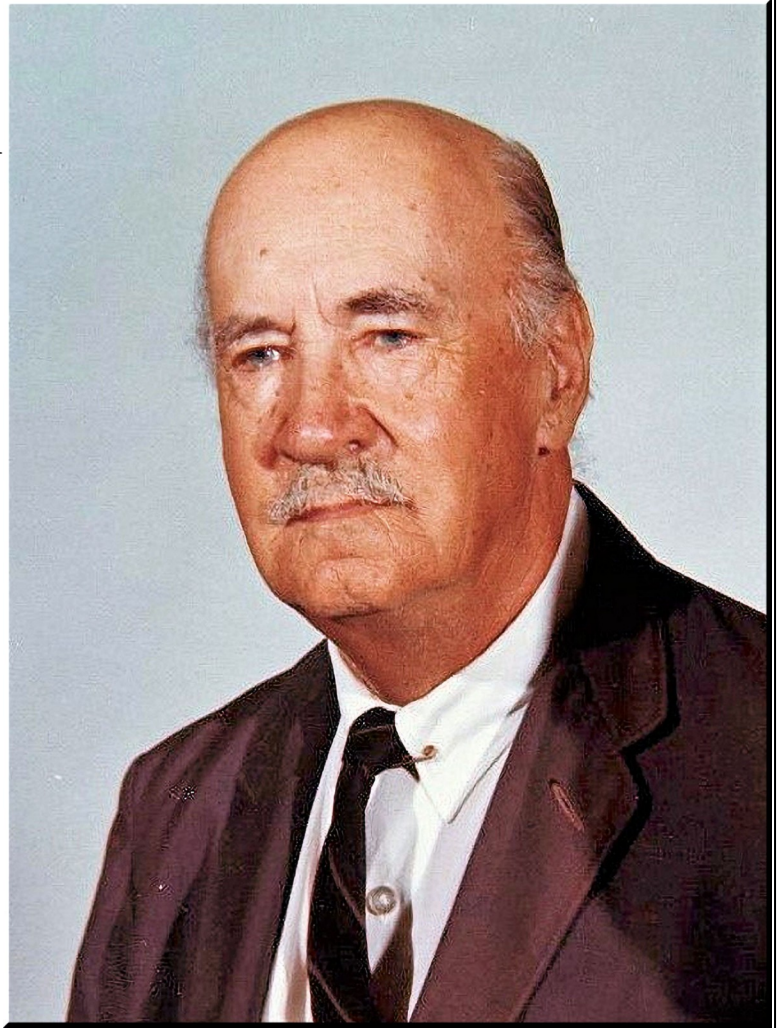
Pan Am continued to expand worldwide throughout World War II. Trippe is responsible for several innovations in the airline world. A firm believer in the idea of air travel for all, Trippe is credited as the father of the tourist class in the airline industry, and was the driving force behind Pan Am's formation of the **InterContinental Hotel Group**.

Trippe quickly recognized the opportunities presented by jet aircraft and ordered several Boeing 707 and Douglas DC-8 airplanes. Pan Am's first scheduled jet flight was operated on October 26, 1958 by 707 Clipper America from Idlewild International Airport (now JFK) to Le Bourget Airport, Paris. The new jets allowed Pan Am to cut the flight time nearly in half, introduce lower fares, and fly more passengers in total.

In 1965, Trippe asked his friend Bill Allen at Boeing to produce an airplane much larger than the 707. The result was the Boeing 747, and Pan Am was the first customer. Trippe suffered a stroke in September 1980, which forced him to cut back on his workload; he died after suffering a second stroke at his New York City home on April 3, 1981, at the age of 81. He is buried in Green-Wood Cemetery in Brooklyn.

Igor Sikorsky was born in Kiev, Russian Empire (now Ukraine). After World War I, seeing little opportunity for himself as an aircraft designer in war-torn Europe, and particularly Russia, ravaged by the October Revolution and Civil War, he emigrated to the United States, arriving in New York on March 30, 1919.

In the U.S., Sikorsky first worked as a school teacher and a lecturer, while looking for an opportunity to work in the aviation industry.



In 1932, he joined the faculty of the University of Rhode Island to form an aeronautical engineering program and remained with the university until 1948. In 1928, Sikorsky became a naturalized citizen of the United States. The Sikorsky Manufacturing Company moved to Stratford, Connecticut in 1929. It became a part of the United Aircraft and Transport Corporation (now United Technologies Corporation) in July of that year. The company manufactured flying boats, such as the S-42 "Clipper", used by Pan Am for transatlantic flights.

By the start of 1929, thanks to new Foreign Airmail contracts won with the passage of the Foreign Airmail Act of 1928, Pan Am was going to be flying much farther over longer routes to places throughout the Caribbean and Central America. A great deal of this flying was over water between islands or to places along coastlines where the only place to land was on water. Juan Trippe reached out to him at the end of 1929 with a request for a bigger transport. After the S-40 (three were built), his next “boat” was the truly evolutionary S-42, in 1934. This aircraft incorporated many aeronautical advances and was a far more capable flying machine than any of his previous designs. Pan Am again was the sole launch customer and bought all ten, which by the end of production had developed into the S-42B.



Sikorsky S-42

Sikorsky S-42 Flying Boats operated by Pan Am

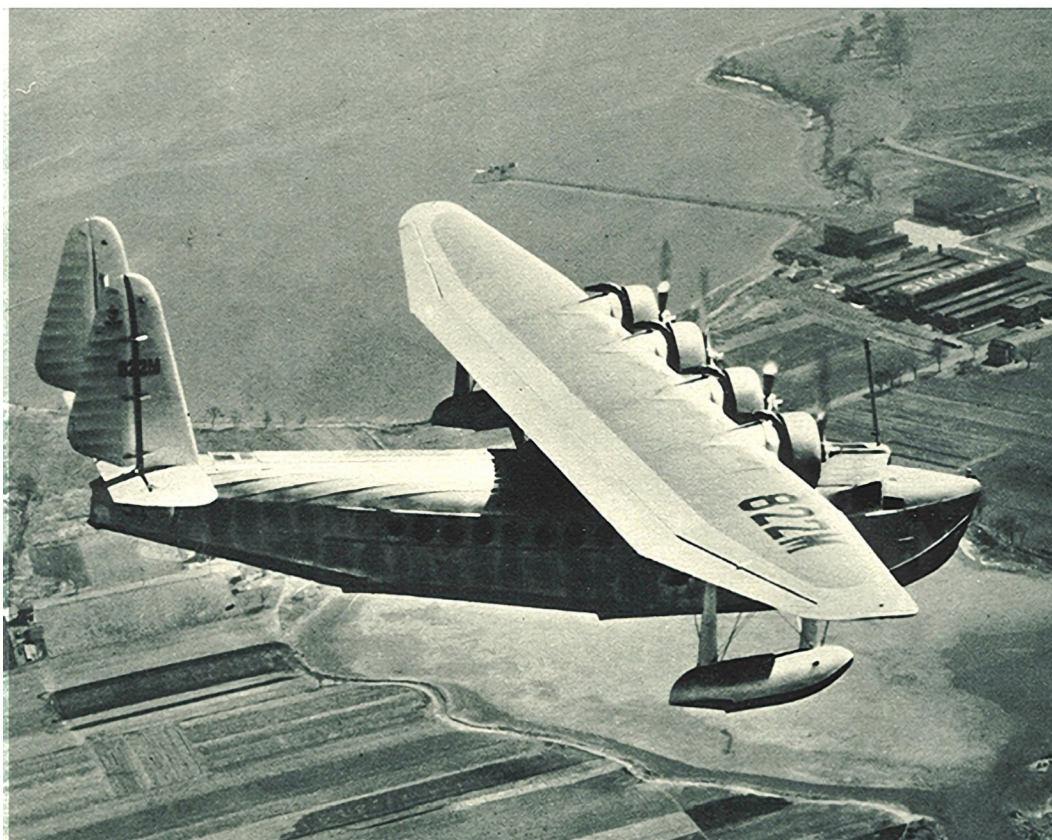
NC15375 **Brazilian Clipper** S-42A Feb 1936 - Jul 15, 1946 Renamed **Columbian Clipper**. Scrapped in 1946.

NC15376 **Dominican Clipper** S-42 Apr 1936 - Oct 3, 1941 Broke up during landing at Port of San Juan.

NC-16734 **Pan American Clipper II** S-42B Sep 1936 - Jan 11, 1938 Later renamed **Samoan Clipper**; lost in crash near Pago Pago which killed chief pilot Ed Musick.

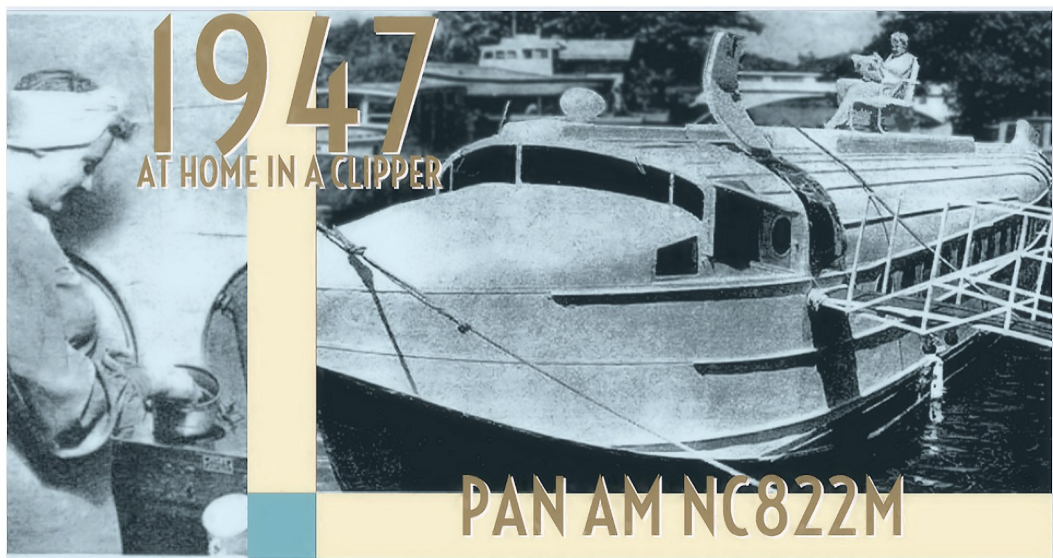
NC16735 **Bermuda Clipper** S-42 Sep 1936 - Dec 8, 1941 Later renamed **Alaska Clipper** and then **Hong Kong Clipper II**. Damaged beyond repair while parked at Kai Tak during Battle of Hong Kong.

NC16736 **Pan American Clipper III**. 1937 - Jul 27, 1943 Later renamed **Bermuda Clipper**; destroyed in accidental fire during preparations for take-off at Manaus, Brazil.

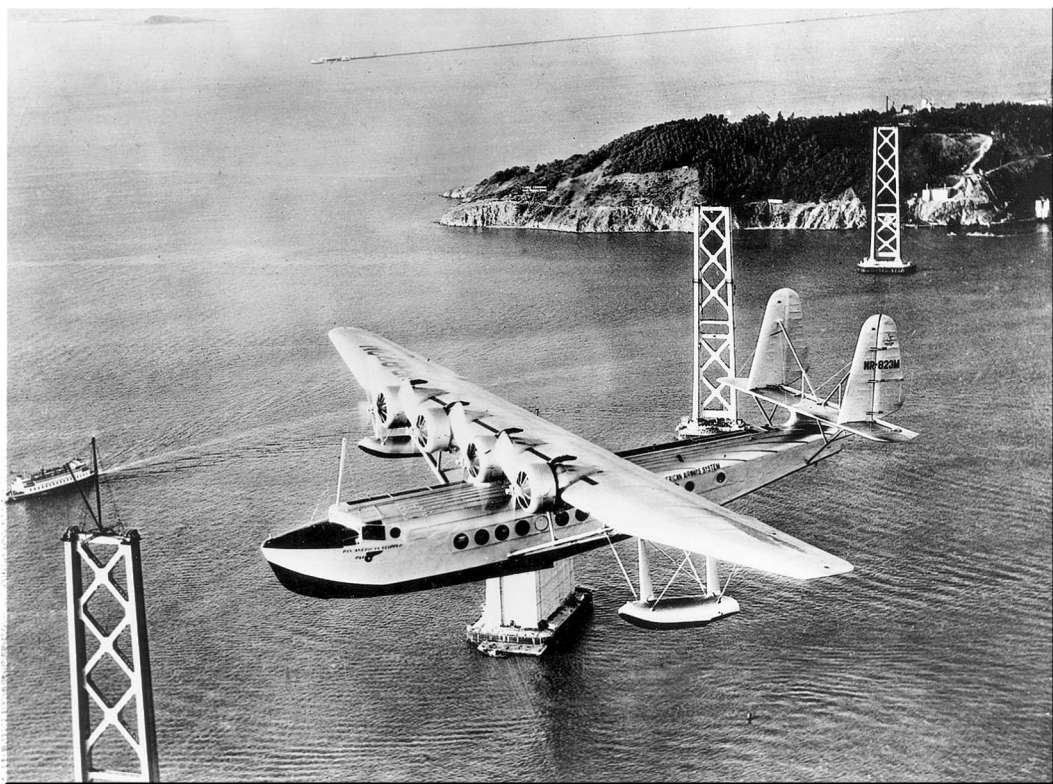


*THE FIRST PAN AM S-42 BRAZILIAN CLIPPER
OVER THE SIKORSKY FACTORY
BRIDGEPORT CONNECTICUT*

NC822M **Brazilian Clipper** S-42 May 1934 - Jul 15, 1946. Delivered to Pan Am in 1934 and christened by Mrs. Getúlio Vargas, wife of the President of Brazil. The first Brazilian Clipper flew in Latin America and was renamed "Colombia Clipper" in 1937. In post-WWII Miami, Lemuel Stewart found a few Flying Boats sat decommissioned, awaiting their fate at the old Dinner Key base. Stewart discovered one could be his for only \$750. In fact the one he bought was the very first Sikorsky S-42 Pan Am had acquired - the Brazilian Clipper NC822M.



By July 1945 Pan Am had announced the cancellation of S-42 flying boat services. And by 1947, thirteen years eventful years after the Brazilian Clipper's first flight, it had a dimly remembered past existence. Now, shorn of wing, motors, and empennage, the old Clipper was about to take off on a new life. Lemuel Stewart was able to jack up the 70 ft. fuselage, load it onto a trailer, and tow it to a nearby canal. He re-caulked the hull and gave it a new coat of paint, and soon she was back in one of her old natural elements – the water. Next, he and his family got to work reconfiguring the interior. Some of the accouterments from the Clipper's airline life stayed – the bunks, and much of the plumbing and electrical wiring, for example. But the craft needed a kitchen, water heater, shower and tub, closets, and furniture to be a usable living space. It was a lot of work. Apparently Mr. Stewart's bottom line was about \$3,000 when the project was done. The unusual housing solution garnered some national attention at the time, such as an article in Flying Magazine. But there the trail goes cold, as far as what might have happened to the Stewarts' floating Clipper home with the passage of time. It's conceivable that somewhere, someday you may find the old Brazilian Clipper gently floating in some quiet backwater. If you do, make sure you mark the spot.



NC823M **West Indies Clipper** S-42 Dec 1934 - Aug 7, 1944 Later renamed **Pan American Clipper** & surveyed trans-Pacific route, then re-named **Hong Kong Clipper** (1937). Sank at Antilla, Cuba. Captain Williams stated that as the plane rose into the air to a height of 10 or 12 feet, he relaxed back pressure slightly, in order to gain speed, whereupon the plane seemed to want to go back on the water so he pulled back on the yoke. When it became obvious to him that the plane was going to go back on the water anyway, he dropped the nose quickly to "flatten out." After striking, bow first, the plane left the water in a slightly nose-high attitude, rose higher than previously, then returned to the water at a much steeper angle. The third time, the plane rose out of control to a height of approximately 25 feet, and in a steeper angle of climb than previously. It then nosed down at a sharp angle and struck the water violently. The nose of the plane struck the water with such force as to cause the hull to fracture and completely separate at a point just aft of the pilot's compartment. The after portion of the plane, which included passenger compartments A, B, C, and D, pitched forward and came to rest in a nearly inverted position with the forward portion fully submerged. Seventeen passengers were killed while all 14 other occupants were rescued.



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Sikorsky S-42 NC823M Pan Am Flight 218 was on a return trip from San Juan to Miami with intermediate stops at Port au Prince and Antilla. The plane, a Sikorsky S42 flying boat, made its takeoff run, attained a speed of about 80 knots and left the surface of the water. As the plane rose into the air to a height of 10 or 12 feet, the captain relaxed back pressure slightly, in order to gain speed, whereupon the plane seemed to want to go back on the water so he pulled back on the yoke. When it became obvious to him that the plane was going to go back on the water anyway, he dropped the nose quickly to "flatten out." After striking, bow first, the plane left the water in a slightly nose-high attitude, rose higher than previously, then returned to the water at a much steeper angle. The third time, the plane rose out of control to a height of approximately 25 feet, and in a steeper angle of climb than previously. It then nosed down at a sharp angle and struck the water violently. The nose of the plane struck the water with such force as to cause the hull to fracture and completely separate at a point just aft of the pilot's compartment. The after portion of the plane, which included passenger compartments A, B, C, and D, pitched forward and came to rest in a nearly inverted position with the forward portion fully submerged.



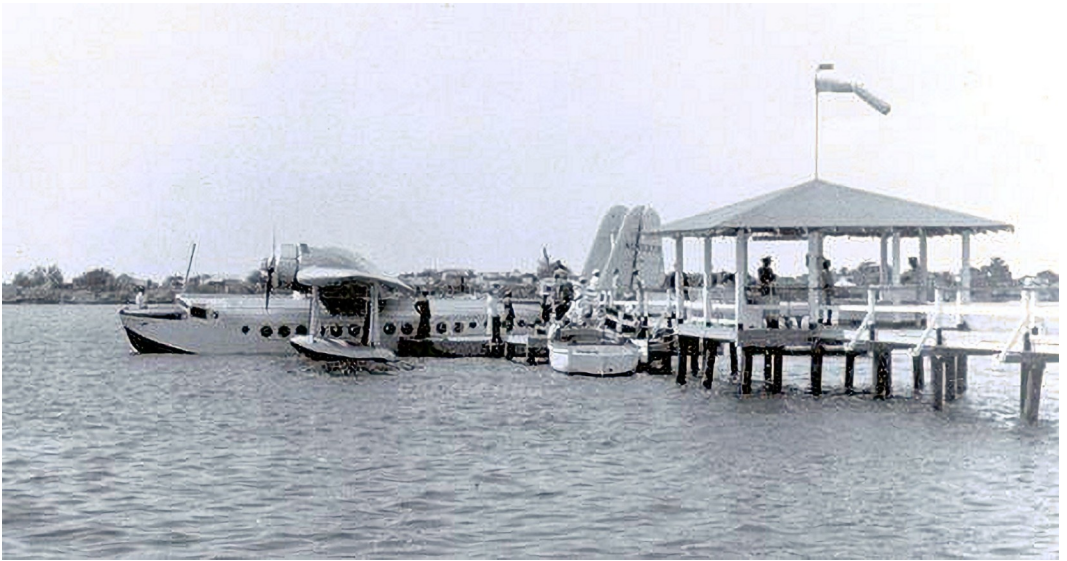
NC824M Puerto Rican Clipper S-42

NC824M Puerto Rican Clipper S-42 May 1935 - Apr 11, 1936 Swerved to miss boat during takeoff at Port of Spain & destroyed.

Date & Time: Dec 20, 1935. Type of aircraft: Sikorsky S-42. Operator: Registration: NC824M. Flight Phase: Landing (descent or approach). Flight Type: Scheduled Revenue Flight. Survivors: Yes. Site: Airport (less than 10 km from airport). MSN: 4202. YOM: 1935. Location: Port of Spain All Trinidad and Tobago. Country: Trinidad and Tobago. Region: Central America. Crew on board: 5. Crew fatalities: 0. Pax on board: 20. Pax fatalities: 3. Other fatalities: 0. Total fatalities: 3. Circumstances: On landing in the harbor of Port of Spain, Trinidad Island, the seaplane aircraft went out of control and sunk rapidly. At least three passengers were killed.

The flight originated in Miami, FL and was bound for Buenos Aires, Argentina. Intermediate stops were planned at amongst others Port of Spain, Trinidad and Natal, Brazil. It was taking off when the pilot saw a fishing boat in his path and swerved sharply to avoid it but one pontoon struck the boat and the plane reportedly overturned. Three occupants drowned.

From The Virgin Daily News April 17, 1936 "Salvage work will be started shortly to restore the Puerto Rican Clipper, a giant Pan American Airways flying boat, which collided with a launch in the harbor of Port Of Spain, Trinidad, and sank. The Clipper will again be put into active service with the replacement of a new pontoon."



NC15373 Jamaica Clipper

July 1935 Delivery: "Jamaica Clipper" NC-15373 was the 1st of four Pan Am Sikorsky S-42As that were modified with improved aerodynamics and longer wing spans than Pan Am's original S-42s. Pan Am S-42 as flew throughout the Caribbean and South America from Miami Dinner Key Terminal. Jamaica Clipper flew until 1946 (Photo Jamaica Clipper at San Pedro de Macoris Seaplane Base, Dominican Republic, (PAHF Collection) & Pan Am Flying Clipper Cruise Ad, 1941. It was scrapped in July 1946 after 9 years of South American service.

Sikorsky S-42A - Production aircraft with four 750 hp (559 kW) Pratt & Whitney Hornet S1EG radial engines, longer wings and a 2,000 lb (907 kg) increase in maximum takeoff weight, four built: NC 15373, NC 15374, NC 15375, NC 15376.

The S-42A could carry up to 32 passengers (at maximum load) or 14 passengers (in the version with berths). Four aircraft of this modification were built: NC15373 "Jamaica Clipper", NC15374 "Antilles Clipper", NC15375 "Brazilian Clipper" (the second machine with this name), NC15376 "Dominican Clipper".



NC15374 Antilles Clipper

Ordered on October 1, 1932, Trippe wanted a luxury plane that could fly faster and longer than the S-40. On May 6, 1934, Sikorsky delivered the first of 10 S-42's to Pan Am.

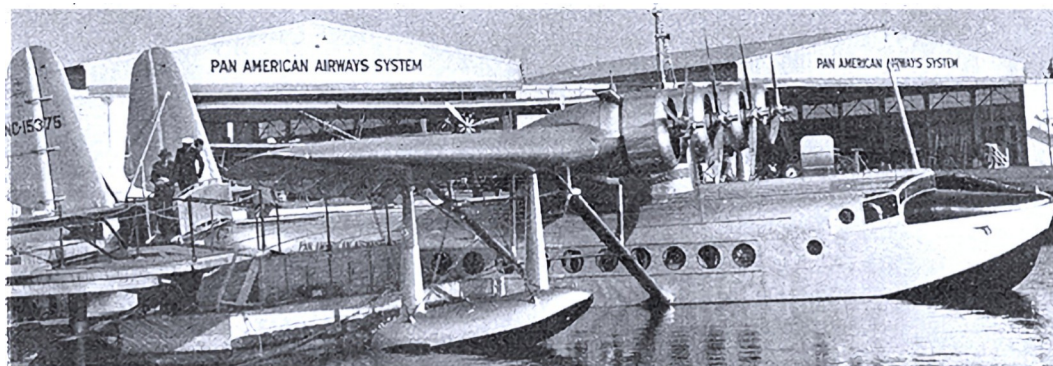
The first S-42 was flight tested in April, 1934, and the aircraft quickly demonstrated its impressive abilities. On April 26 the plane lifted more than eight tons of payload to 16,000 feet, and on May 17 it climbed to a record of altitude of 20,407 feet while carrying over 11,000 lbs.

Air travel was becoming comfortable as it was exciting. America's love affair with the flying boat began with what really was the first of Pan American's great clippers. Pan Am would bring the Orient to America's doorstep.

On the final test flight the S-42 broke 8 world records for weight carrying. It could carry a payload large enough for commercial success. In August of 1934 Pan Am began service from Miami to Rio de Janeiro. Its success gave Pan Am a clear lead over its competition.

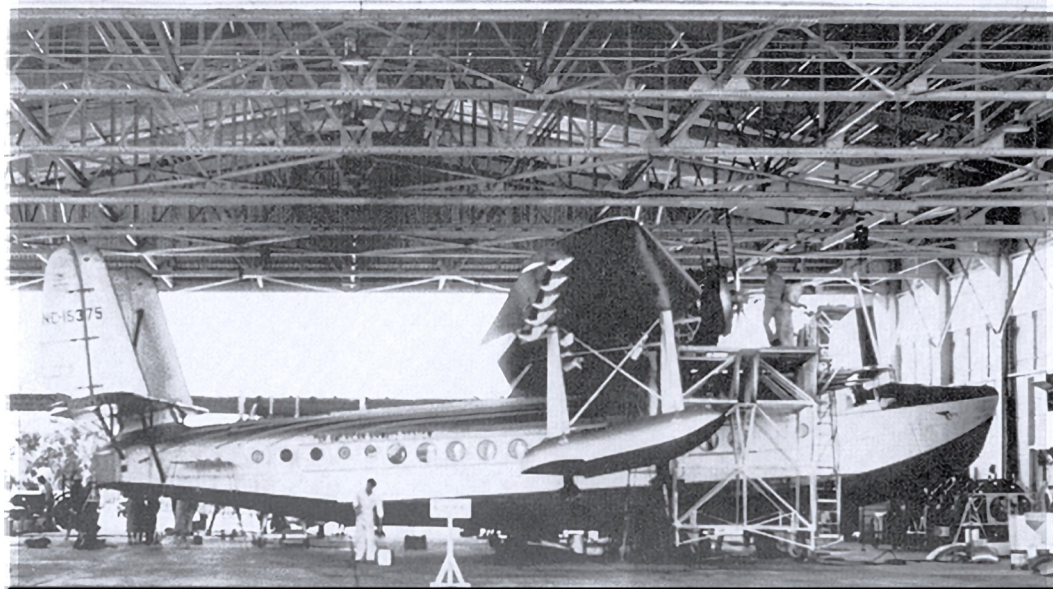
April 11, 1936 - Sikorsky S-42 **NC15374 Antilles Clipper** crashed on takeoff from Port of Spain, killing three of 22 on board. On liftoff the pilot noticed a fishing boat in the aircraft's path and performed a sharp turn, but a pontoon struck the boat and the aircraft crashed.

The crew noticed the boat too late and the evasive maneuver was also too late. Despite the crash, the aircraft was repaired and returned to service but was ultimately scrapped in 1946.



PAN AM S-42A BRAZILIAN CLIPPER (NC15375)

AT DINNER KEY MIAMI



Did you know Pan Am had two "Brazilian Clipper" S-42 flying boats? The first S-42, NC822M, was delivered in June 1934 and christened by Mrs. Getúlio Vargas, wife of the President of Brazil. It was renamed "Colombia Clipper" in 1937. "On her initial visit to the U.S., the first lady of Brazil arrived at the Pan Am Int'l Airport in March. The big Clipper spent a half hour circling Miami and Senhora Vargas expressed herself as delighted with the flight from Brazil, and in the comfort, speed and ease with which the giant four-engined Clipper Ships linked the South American republics and the United States of North America — giving tangible life to the sentiments expressed by herself in christening the first of the great trans-ocean type of Clipper Ships, the Brazilian Clipper, in Rio de Janeiro two years ago [1934]." (Taken from: Pan American Air Ways March-April 1936)



NC15376 Dominican Clipper S-42 Apr 1936 - Oct 3, 1941

Pan Am flight 203, October 3, 1941. This flight started at Miami at 07:33 EST and was destined for Buenos Aires. It never arrived. Instead it crashed on landing at it's stop in San Juan Harbor, Puerto Rico. Mr. Harold Roebuck, a native Puerto Rican, "repeatedly dived and swam through the partially submerged cabin, freeing passengers and removing them from the wreckage. This action was attended by considerable hazard and physical discomfort as the surface of the water was covered by gasoline from the wreckage." (quote from the CAB report).

Memories of young passenger Fred Russo: "I know from my parents, and recalling engraved in my memories, as the plane was approaching landing I was looking out the window to see all the bright lights of San Juan. My two sisters, my Mother and I were on the left side of the plane and I was sitting by the window with my back to the pilot's cabin as the chairs were twins facing each other.

My Mother, Angelina Seraphina Sibia Russo, was on the aisle seat facing the pilot's cabin. My Sister Marie Josee, facing my Mother and sitting next to me (in the arms of the steward according to the CAB report). My Baby Sister, Marie Suzie Russo (14 months) was laid on the seat in front of me (in her mother's arms according to the CAB report). Note that my 2 sisters, being small, did not have seat belts on.

As the plane was landing Marijoe got up and came to look out the window with me. As the plane hit the water the window blew up in my face and the glass went into my right eye arcade and, as per my parents, my eye ball was out of its socket. On impact Marie-jo was projected into the pilot's cabin which at the time was opened and should have been closed during landing.

Continued:

NC15376 Dominican Clipper S-42 Apr 1936 - Oct 3, 1941

I was in the water when someone carried me to my Mother Angelina who was bruised and hanging on the plane's wing in the sea. We were taken from the wing and placed in a Navy "Dingy" rubber boat. I remember I saw red, probably the blood running out of my eye, and I only had one white shoe and lost the other and of course cold and crying.

Unfortunately the Navy due to security reason during the war send all ships out to sea at night and only had small boats for the rescue. The Coast Guard cutter Unalga "sped to the rescue."

The next morning my Father, with his Navy crew from the Naval Air Station, found Mariejo in the pilot's cabin with severe head trauma and deceased. My younger sister Susie was found a few days latter floating in the bay of San Juan. Both were buried in Puerto Rico.

A year later when my Father was transferred and we were returning to Haiti "They" refused to give us back the bodies of the two girls. My Mother decided that she would not leave Puerto Rico unless "They" gave her back her two daughters. The Governor of Puerto Rico, then Mr. Munos Marin, and President Roosevelt did intervene and as per President's Roosevelt telegram "...Donnez pleine satisfaction a Madame Russo.."

Then my 2 sisters were buried in Haiti in our family vault and now my Father Salvatore Russo as well as my Mother have joined their daughters. Please note I am not sad any more telling this story. I have came to accept the facts of life as must we all.

By closing this note I want to remember all of the heros families who had contributed to the salvage of this plane crash and especially Mr. Roebuck and Mr. Keating. From one Gratefull survivor of this plane crash 68 years ago!" Fred Russo.

Pan American downplayed the injuries to the passengers during the crash. Young Fred Russo had a serious head injury from the window that he was looking out shattering into his face. His eye was knocked out of it's socket. Fortunately his eye was saved (he later became a doctor).

The CAB report concluded that the wreck was the fault of the pilot, Captain Charles A. Lorber. He was landing the plane with the nose too low and had turned off the engines too soon. This was compounded by a slight cross wind that was moving the plane to the left somewhat and the fact that he was landing downwind with a 3 Mph tail wind. Sometimes the flight engineer manages the engine speeds. In this case captain Lorber was managing the engine speeds himself.

PAN AM HISTORICAL FOUNDATION



SIKORSKY S-42 *Samoan Clipper* IN PAGO PAGO, DECEMBER 1937. THIS PLANE EXPLODED IN FLIGHT NEAR SAMOA JANUARY 11, 1938, KILLING CAPT ED MUSICK AND HIS CREW

NC-16734 **Pan American Clipper II** S-42B Sep 1936 - Jan 11, 1938 Later renamed **Samoan Clipper**; lost in crash near Pago Pago which killed chief pilot Ed Musick.

Samoan Clipper was one of ten Pan American Airways Sikorsky S-42 flying boats. It exploded near Pago Pago, American Samoa, on January 11, 1938, while piloted by aviator Ed Musick. Musick and his crew of six died in the crash. The aircraft was carrying only airmail and express freight; no passengers were aboard.

The aircraft developed an oil leak shortly after taking off from Pago Pago harbor, and the crew decided to return to port. However, the S-42, fully loaded with fuel, was too heavy to land safely in the limited space of the harbor, so the crew elected to dump fuel before landing. While fuel dumping was in progress, there was a fire and explosion which destroyed the aircraft, killing all aboard. The exact cause of ignition for the fire could not be determined.

FIFTEEN CENTS

THURSDAY, 7, 1939

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The Weekly Newsmagazine



Cover: Blue Yans

Volume XXVI

PAN-AMERICAN'S MUSIC

Edison-Litton (Columbia) (Cliff)
(from "Tears and Joy")

Number 23

Circulation this issue more than 550,000

NC16735 Hong Kong Clipper II S-42 Sep 1936 - Dec 8, 1941

It was a pitch black Monday morning in December when Pan American Capt. Fred S. Ralph got word that the "Hong Kong Clipper," which he had piloted from Manila the day before, was scheduled for an extra-early return trip takeoff from Hong Kong's Kai-tek airport.

Capt. Ralph and his six-man crew* hurried to Pan American's Clipper base at the airport, had about readied the ship for departure when they learned — at 7:10 a.m. — that the flight would be delayed. Five minutes later, Capt. Ralph heard that Japan had declared war on Great Britain, instantly directed his men to remove their belongings from the Clipper.

They were just finishing this task when the Japanese bombers appeared, pounded the Kai-tek airport with bomb after bomb, crippled several CNAC (Pan Am subsidiary, China National Aviation Corporation) planes standing on the field, dug huge holes in the runway, shattered the roof of the hangar.

So suddenly did the bombers appear that Capt. Ralph's men scarcely had time to gain the comparative safety of Pan American's dockhouse. Last to leave the Clipper, Capt. Ralph leaped from the dock into three feet of water, found cover behind a large concrete post. Back came the Japanese, this time with machine guns roaring.

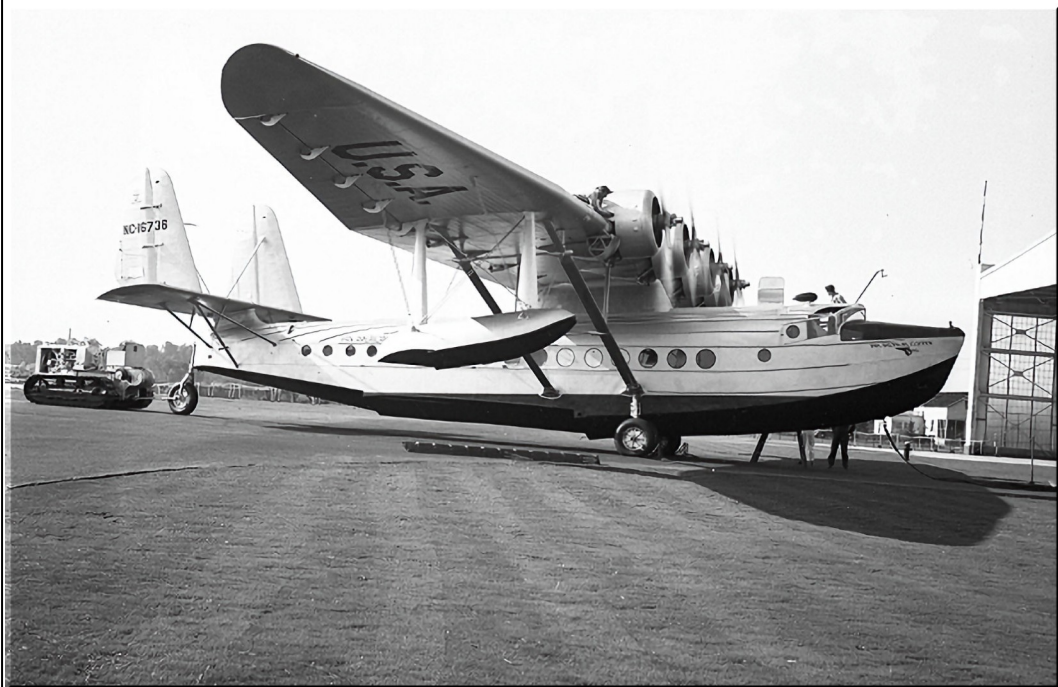
Swerving like angry hornets, they swooped to within 50 feet of the ground, made 6 dives directly at the Hong Kong Clipper. On the 7th dive, they scored with incendiary bullets. The flying ship burst into flames, burned to the water's edge.

Up from his water bomb shelter Capt. Ralph, at once began to help organize one of the most remarkable evacuation feats in the history of aviation. That was the last the world heard of the Hong Kong Clipper's crew for more than a month.

Then January, 10, Capt. Ralph, his crew and 2 other Pan American personnel appeared in New York. Though they had flown by Clipper all the way to New York from an Indian Ocean seaport, they had not arrived on the Pacific Clipper whose 31,500-mile Round-the-World flight from San Francisco had ended at Pan American's New York Marine Terminal only 4 days before.



**CAPT. FRED RALPH (L.) WITH CNAC PERSONNEL AT CHONGQING
AFTER EVACUATION FROM HONG KONG.**

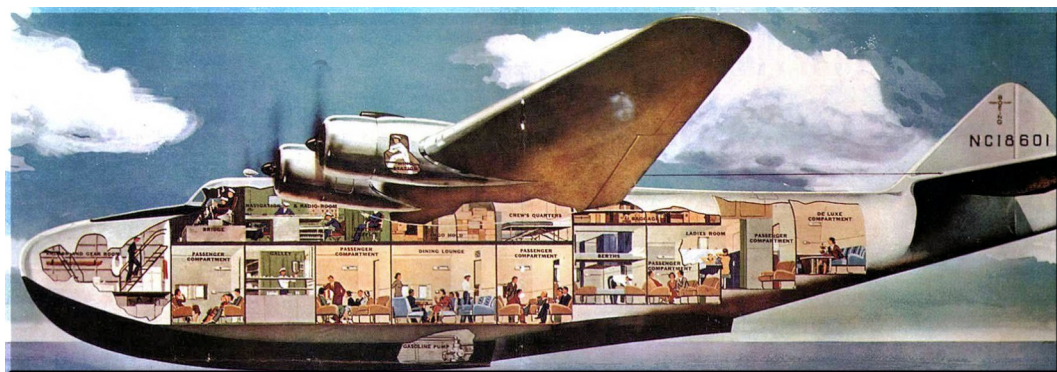


**NC16736 Pan American Clipper III. 1937 - Jul 27, 1943 Later
renamed Bermuda Clipper**

Pan American Clipper III was the last S-42 B delivered by Sikorsky in mid-1937. The S-42 B's featured more powerful engines, extended wingspans and greater fuel capacity than the earlier S-42 versions. Pan American Clipper III and the British Caledonia flying boat jointly made the first transatlantic commercial "survey" flights to and from Port Washington on July 5 to 6, 1937. "Survey flights" was the official term used to describe the testing of heretofore unchartered air routes.

In 1940, the Clipper III served the Bermuda route as the Bermuda Clipper and then to South America. It was destroyed by a fire at Manaus, Brazil on July 27, 1943. All aboard survived.

The "Bermuda Clipper" was fully loaded, with passengers and crew, ready for departure from Manaus, Brazil. A fire developed in the carburetor of the No. 1 engine and the pilot directed the flight mechanic to pull the fire extinguisher handle. The mechanic then pulled the fuel dump handle by mistake. Flaming gas fell from the carburetor onto the gas on the water, igniting it, and causing the loss of the plane. All occupants were able to evacuate the aircraft.



Boeing B-314 Cutaway View

The Boeing 314 Clipper was an American long-range flying boat produced by Boeing from 1938 to 1941. One of the largest aircraft of its time, it had the range to cross the Atlantic and Pacific oceans. For its wing, Boeing re-used the design from the earlier XB-15 bomber prototype. Twelve Clippers were built, nine of which served with Pan Am.

On July 21, 1936, Pan American signed a contract for six. Boeing engineers adapted the 149 ft wing with the 1,600 hp Wright Twin Cyclone. Pan Am ordered six more aircraft with increased engine power and capacity for 77 daytime passengers as the Boeing 314A. To fly the long ranges needed for trans-Pacific service, the 314 carried 4,246 US gallons of gasoline. The later 314A model carried a further 1,200 US gallons. A capacity of 300 US gallons of oil was required for operation of the radial engines.

Pan Am's "Clippers" were built for "one-class" luxury air travel, a necessity given the long duration of transoceanic flights. The seats could be converted into 36 bunks for overnight accommodation; with a cruising speed of 188 miles per hour. In 1940, Pan Am's schedule San Francisco to Honolulu was 19 hours. The 314s had a lounge and dining area, and the galleys were crewed by chefs from four-star hotels. Men and women were provided with separate dressing rooms, and white-coated stewards served five and six-course meals with gleaming silver service.

The first 314 flight on the San Francisco-Hong Kong route left Alameda on February 23, 1939 with regular passenger and Foreign Air Mail Route #14 service beginning on March 29. A one-way trip on this route took over six days to complete. Commercial passenger service lasted less than three years, ending when the United States entered World War II in December 1941. The last Pan Am 314 to be retired, the California Clipper NC18602, in 1946, had accumulated more than a million flight miles.

Boeing B-314 Flying Boats operated by Pan Am



NC18601 B-314 Honolulu Clipper 1939–1945

It was almost midnight several hundred miles east of Hawaii on the night of November 3rd, 1945 when Captain “Robbie” Robbins brought the big plane down to a masterful landing on a rough ocean surface. With two engines out, and losing altitude despite dumping fuel and cargo, he had little choice. All aboard were safe, and the aircraft was in good shape. Another Pan Am B-314, the California Clipper, was also en route to San Francisco not far behind, and took up an orbiting station above her stricken sister ship to help guide rescue vessels to the scene. Help soon arrived and passengers and crew were transferred without incident..

Engine repair attempts failed. The plane was put in tow by the USS Manila Bay, a navy escort carrier, but the tow rope parted. The attempt to save the clipper dragged on with the arrival of the USS San Pablo, a navy seaplane tender. With seas running high, another attempt to tow the big flying boat was made, but this time, the effort to secure a tow line resulted in damage to the plane when ship and plane collided.

It was now November 8th. Radioed instructions from the Navy Commandant in Hawaii sealed the fate of the Honolulu Clipper. She was now a hazard to navigation and after 30 minutes of target practice with 20mm cannon fire from the San Pablo standing a mile away, she sank to the abyssal plain of the Pacific three miles down.



NC18602 B-314 California Clipper 1939–1950

The California Clipper, later renamed Pacific Clipper (NC-18602) was a Boeing 314 Clipper flying boat, famous for having completed Pan American World Airways' first around the world flight in December 1941-January 1942; it was also the first commercial plane flight to circumnavigate the world.

On December 2, 1941, the Clipper departed from the Pan Am base on Treasure Island, San Francisco for its scheduled passenger service to Auckland, New Zealand. It landed at Pan American's LaGuardia Field seaplane base in New York City five weeks later, on the morning of January 6, 1942. NC18602 made scheduled stops in San Pedro, California, Honolulu, Hawaii, Canton Island, Suva, Fiji and Nouméa, New Caledonia en route to Auckland when Pearl Harbor was attacked.

Cut off from the United States due to the bombing of Pearl Harbor on December 7, 1941, because the aircraft was a valuable military asset Captain Robert Ford was directed to strip company markings, registration, and insignia from the Clipper and proceed in secret to the Marine Terminal, LaGuardia Field, New York.

Ford and his crew successfully flew over 20,000 miles from Auckland via Gladstone and Darwin Australia, Surabaya in Java, Trincomalee in Ceylon, Karachi in British India, Bahrain, Khartoum in Sudan, Léopoldville in Belgian Congo, Natal in Brazil, Port of Spain in Trinidad and Tobago, New York, arriving January 6, 1942.

At Surabaya, Captain Ford had to refuel with automobile grade gasoline, instead of their usual 100 octane. "We took off from Surabaya on the 100 octane, climbed a couple of thousand feet, and pulled back the power to cool off the engines," said Ford. "Then we switched to the automobile gas and held our breaths. The engines almost jumped out of their mounts, but they ran. We figured it was either that or leave the airplane to the Japs."

On the way to Trincomalee, they were confronted by a Japanese submarine, and Ford had to jam the throttles forward to climb out of range of the submarine's guns. On Christmas Eve, when they took off, black oil began gushing out of the number 3 engine and pouring back over the wing. Ford shut down the engine and returned to Trincomalee. He discovered one of the engine's cylinders had failed.

When Captain Ford was planning his flight from Bahrain, he was warned by the British authorities not to fly across Arabia. Ford said, "The Saudis had apparently already caught some British flyers who had been forced down there. The natives had dug a hole, buried them in it up to their necks, and just left them." Ford flew right over Mecca because the Saudis did not have anti-aircraft guns.

A Pan American airport manager and a radio officer had been dispatched to meet the Clipper at Leopoldville. When Ford landed they handed him a cold beer. Ford said, "That was one of the high points of the whole trip."

After being airborne over twenty hours, they landed in the harbor at Natal just before noon. While they were waiting for the necessary immigration formalities to be completed, the Brazilian authorities insisted that the crew disembark while the interior of the airplane was sprayed for yellow fever. It wasn't until after they had departed that the crew made an unpleasant discovery.

Most of their personal papers and money were missing, along with a military chart that had been entrusted to Navigator Rod Brown by the US military attache in Leopoldville, obviously stolen by the Brazilian "fumigators."

After the aircraft had completed its harrowing flight to safety, Pan Am renamed the aircraft the Pacific Clipper. The name change was mainly for publicity purposes, arising from the first newspaper articles having wrongly identified the aircraft.

On 30 / January 31, 1942, the Pacific Clipper transported Under Secretary of State Sumner Welles from the Pan-American emergency defense conference at Rio de Janeiro to Miami, covering the 4,350 miles in a record 33 hours. The black and grey camouflaged ship carried 39 passengers. It was at this conference that all of Latin America except Argentina and Chile broke ties with the Axis powers. After the war it was sold to Universal Airlines but was damaged in a storm and ultimately salvaged for parts.



California Clipper in Auckland New Zealand



NC18603 B-314 Yankee Clipper 1939–1943

24 June 1939: The Pan American Airways System began scheduled air service from the United States to Britain. The Boeing 314 Yankee Clipper, NC18603, made the first flight from Port Washington, New York, departing at 8:21 a.m. It made intermediate stops at Shediac, New Brunswick, and Botwood, Newfoundland, where fog delayed the flying boat until 12:49 p.m., 28 June. Continuing across the Atlantic, Yankee Clipper made another stop at Foynes, Ireland, and finally arrived at Southampton at 7:25 p.m. that evening.

The largest airplane of the time, the Pan American Clipper flying boat could carry 77 passengers in “one class” luxury, with a ticket priced at \$675—that’s in 1939 dollars. Uniformed waiters served five and six course meals on silver service. Seats could be folded down into beds.

Crash: The flight maintained an altitude of approximately 7000 feet until it approached the mouth of the Tagus River, approximately 11 miles from Lisbon, when a gradual let-down was made to about 600 feet. Since official sunset was at 6:20 p.m., PanAm’s ground crew at Lisbon had set out as usual a string of landing lights, indicating that the landing was to be made from south to north.

On this particular occasion the light arrangement was slightly different from normal, since the extreme downwind (south) light, which was usually green in color, had been replaced with a white light. The only reason for this change was that the green bulb had burned out and the PanAm station substituted the white bulb.

Captain Sullivan indicated in his testimony that the substitution of lights was not confusing and had no bearing on the accident. This string of five landing lights extended over a distance of approximately 4500 feet. At the time the flight arrived in the area it was still light enough for the aircraft to be observed plainly by personnel in the PanAm launch and on the shore.

The landing conditions and barometric pressure were given to the flight by radio at 6:35 p.m. and were acknowledged with a statement from the flight that they would want flares when both landing lights were blinked.

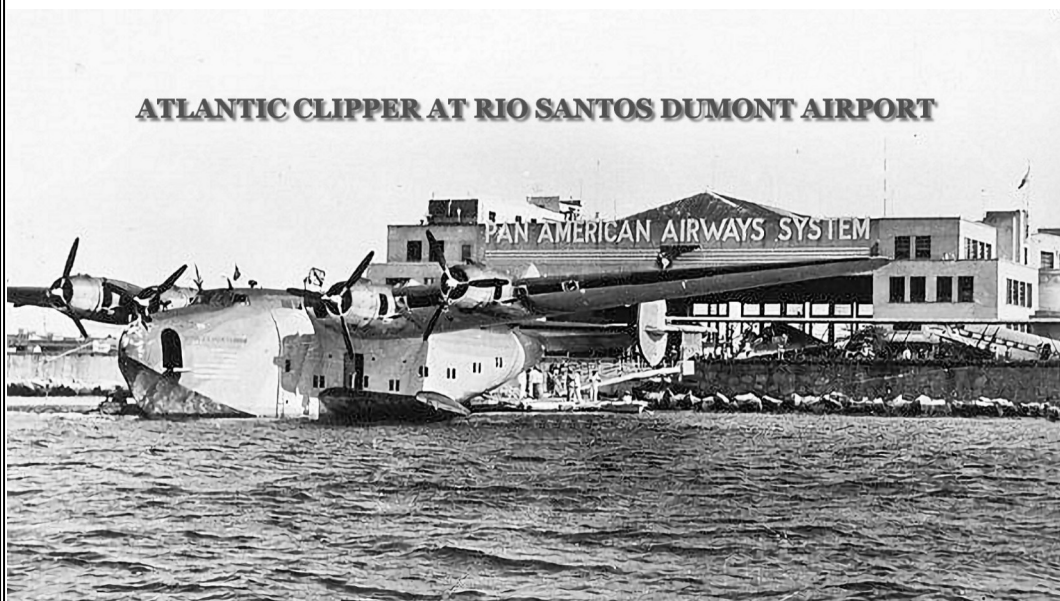
While proceeding in a northeasterly direction, at an estimated speed of 135 knots and at an altitude of between 500 and 600 feet over the area, about 1 1/2 miles east and abeam of the center light in the string of landing lights, the aircraft made a descending, turn to the left which continued until it was headed in a westerly direction when the left wing tip skimmed along the surface of the water, dug in and the plane crashed into the river.

It remained partially submerged for approximately 10 minutes, then disappeared below the surface of the river. The PanAm launch, which had been standing by for the landing, proceeded to the scene of the accident, arriving about 10 minutes later, and began rescue operations. The PanAm launch was joined by a BOAC launch (British) and another PanAm launch approximately 10 minutes later.

The American actress Tamara Drasin and the American novelist Ben Robertson were killed in the crash while the actress Jane Froman was seriously injured. Seven crew were killed and seventeen of the twenty seven passengers killed.

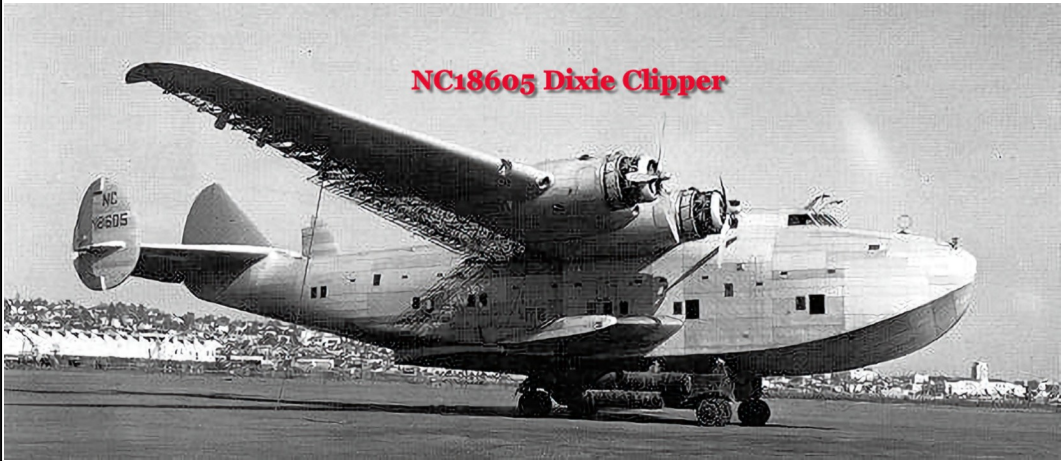
Probable cause: It appears that the probable cause of this accident was an inadvertent contact of the left wing tip of the aircraft with the water while making a descending turn preparatory to landing.

NC18604 B-314 Atlantic Clipper 1939–1946



Purchased by the US Navy in 1942. Salvaged for parts.





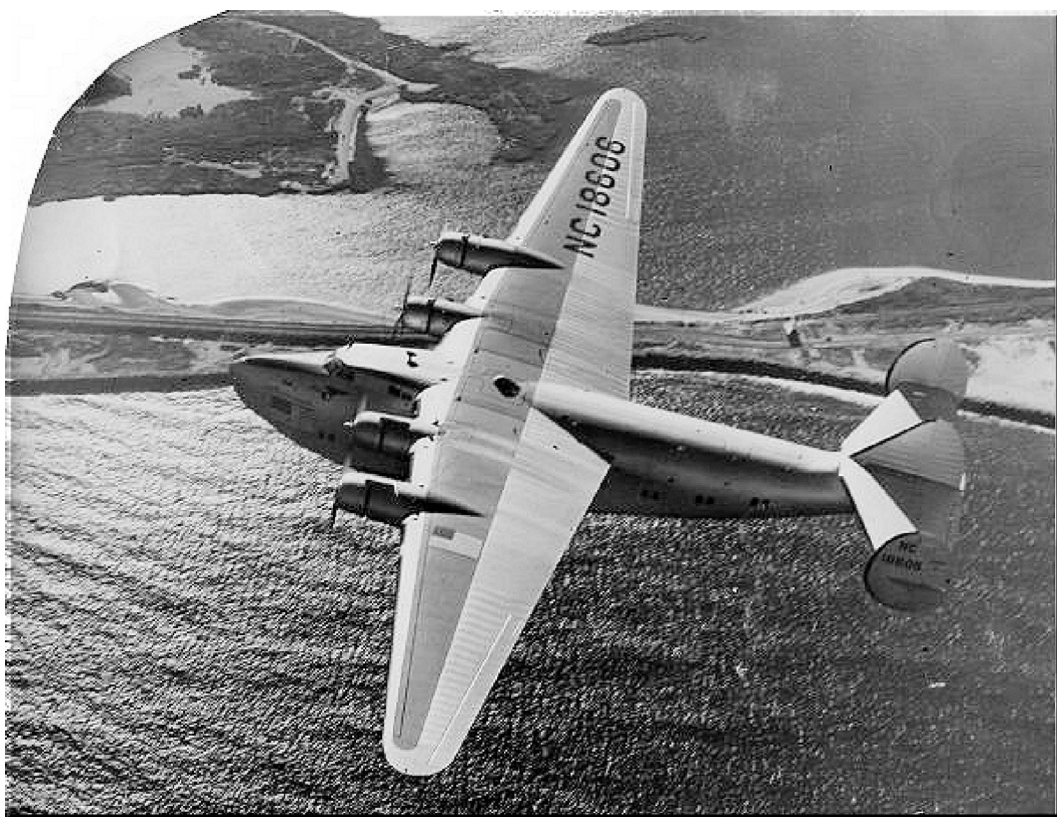
NC18605 B-314 Dixie Clipper 1939–1950

Started transatlantic passenger service, later sold to World Airways. First presidential flight for the Casablanca Conference. Scrapped 1950.

The Casablanca Conference (codenamed SYMBOL) or Anfa Conference was held at the Anfa Hotel in Casablanca, French Morocco, from January 14 to 24, 1943, to plan the Allied European strategy for the next phase of World War II. In attendance were United States President Franklin D. Roosevelt and British prime minister Winston Churchill. Also attending were the sovereign of Morocco Sultan Muhammad V and representing the Free French forces Generals Charles de Gaulle and Henri Giraud, but they played minor roles and were not part of the military planning. USSR general secretary Joseph Stalin declined to attend, citing the ongoing Battle of Stalingrad as requiring his presence in the Soviet Union.

The conference's agenda addressed the specifics of tactical procedure, allocation of resources, and the broader issues of diplomatic policy. The debate and negotiations produced what was known as the Casablanca Declaration, and perhaps its most historically provocative statement of purpose, "unconditional surrender". That doctrine came to represent the unified voice of implacable Allied will and the determination that the Axis powers would be fought to their ultimate defeat.

NC18606 B-314 American Clipper 1939–1946



Atlantic service. Sold to Navy 1942, World Airways. Scrapped 1950





NC18609 B-314A Pacific Clipper 1941–1946

Temporarily named California Clipper to replace 18602 that was being moved to Atlantic service. Renamed Pacific Clipper in 1942. Later sold to Universal Airlines. Damaged by storm and salvaged for parts.

Civil Operations - Pearl Harbor had a major impact on Pan Am's operations. The Pacific Clipper, NC18609, was in New Zealand at the time. Because of uncertainty as to the disposition of Japanese forces in the Pacific, it returned to the U.S. by flying on westward via Africa and South America. The final Pan Am Clipper flight in the Pacific ended on April 9, 1946, when Pacific Clipper NC 18609 reached San Francisco from Hawaii. It was replaced on that route by the Lockheed "Constellation", another prewar landplane design that had been appropriated by the Army and did not become available to civil users until after the war. Since it held title to seven Boeing 314s that Pan Am did not want to take back, the Navy turned them over to WAA. The first postwar year was one of optimism for a rash of new "non-scheduled" airline companies, and the surplus Clippers soon found a buyer, Universal Airlines. This organization refurbished them for the hopefully prosperous tourist trade, though one, NC 18609, was scrapped for spares needed to get the others airworthy.



NC18611 B-314A Anzac Clipper 1941–1951

Pearl Harbor 1941 - The Anzac Clipper NC-18611, was an hour out of Honolulu westbound when the attack came. It was diverted to Hilo, an alternate terminal some 200 miles south of Pearl Harbor, discharged its passengers, and returned to San Francisco.

Pan Am's last Clipper flight over the Atlantic took place on December 21, 1946 when AnzacClipperNC18611 left Lisbon, landing in New York on the 23rd (other sources say January 6, 1946, but that may not have been the Lisbon flight!. DC-4s had taken over the Atlantic run starting on October 27, 1945.

Pacific and Atlantic service. Sold to the U.S. Navy in 1942. Sold to American International Airways after the War in 1947 and then to World Airways in 1948; sold again in 1951 and destroyed in Baltimore, Maryland in late 1951.



Sold to US Navy 1942, American International Airways 1947. As the Bermuda Sky Queen she ditched at sea on October 14, 1947. After the rescue of all passengers and crew she was sunk by the United States Coast Guard as a hazard to navigation. Sold to US Navy 1942, American International Airways 1947. As the Bermuda Sky Queen she ditched at sea on October 14, 1947. After the rescue of all passengers and crew she was sunk by the United States Coast Guard as a hazard to navigation.

None of the dozen 314s built between 1939 and 1941 survived beyond 1951, with all 12 being scrapped, scuttled, cannibalized for parts, or otherwise written off. Underwater Admiralty Sciences, a non-profit oceanographic exploration and science research organization based in Kirkland, Washington, announced in 2005, at the 70th Anniversary of the first China Clipper flight in San Francisco, its plans to survey, photograph, and possibly recover the remains of the hulls of two sunken 314s: NC18601 (Honolulu Clipper), scuttled in the Pacific Ocean in 1945; and NC18612 (Bermuda Sky Queen, formerly Cape Town Clipper), sunk in the Atlantic by the Coast Guard in 1947.



Glenn Luther Martin (January 17, 1886 – December 5, 1955) was an early American aviation pioneer. He founded the Glenn L. Martin Company in 1912. In 1916 he merged his company with the original Wright Company, forming the Wright-Martin Aircraft Company. He soon left and founded a second Glenn L. Martin Company in 1917. That company merged with the American-Marietta Corporation in 1961, becoming the Martin Marietta Corporation. This company merged with the Lockheed Corporation in 1995, forming Lockheed Martin, a major U.S. aerospace and defense contractor. In the 1940s, towards the end of Martin's life, he and his beloved and now aged mother Minta were photographed touring the Martin facilities in Baltimore and celebrating Martin's success as one of the captains in the aviation industry.

The Martin M-130 was a commercial flying boat designed and built in 1935 by the Glenn L. Martin Company in Baltimore, Maryland, for Pan American Airways. Three were built: the China Clipper, the Philippine Clipper and the Hawaii Clipper. All three had crashed by 1945. Martin named them the Martin Ocean Transports, but to the public they were the "China Clippers", a name that became a generic term for Pan Am's large flying boats – the Martin M-130, Sikorsky S-42, and Boeing 314.

Martin M-130 Flying Boats operated by Pan Am



NC14716 **China Clipper** M-130 Oct 9, 1935 Flight 161 departed Miami, Florida, at 06:08 for a flight to Leopoldville, Belgian Congo. The flying boat landed at San Juan Harbor, Puerto Rico, at approximately 14:23. After refueling Flight 161 took off from San Juan, at 16:05 on a contact flight clearance for Port of Spain, Trinidad. Crossing the north coast of Trinidad at an altitude of 4,000 feet, a gradual let-down was started. Wind was calm, and lights to mark the landing area on the surface of the water were laid out on a 70 degree course. The approach was flown by a captain acting as first officer in the left hand seat. During the first approach he came in too high so he was forced to circle the landing area. During the second try, the Martin descended too low and contacted the water at more than normal landing speed and in a nose-low attitude at a point 1.25 miles short of the intended landing area. As the plane came to an abrupt stop in the water, the hull broke in two at a point about three feet aft of the hull step and the rear part of the hull was forced up and forward. Water poured into the cabin and major portion of the flying boat sank immediately. PROBABLE CAUSE: "First Officer failure to realize his proximity to the water and to correct his attitude for a normal landing and, the lack of adequate supervision by the Captain during the landing, resulting in the inadvertent flight into the water in excess of normal landing speed and in a nose-down attitude."



On October 9, 1935 this aircraft made her first public flight. In September 1936 made the first trans Pacific passenger trip with passengers Juan Trippe and Betty Trippe and a group of newspaper publishers to Hong Kong. On January 20, 1943 took off from Pearl Harbor at 5:30pm under the command of Robert M. Elzey on a flight bound for Treasure Island near San Francisco. Aboard were nineteen crew and passengers including four pilots, three engineers, two radio operators and a steward aboard. Passengers aboard were ten U. S. Navy (USN) personnel including Rear Admiral Robert H. English and three of his staff, Captain Robert Holmes Smith and USN nurse Lt. Edna Morrow who was diagnosed with cancer and was returning home. This flight was Pan Am flight 1104 / trip number 62100. A strong tail wind put the aircraft ahead of schedule and was normal.

On January 21, 1943 in the morning this aircraft encountered bad weather including rain, winds, clouds and fog and flew northward towards San Francisco. At 7:30am while descending, crashed into trees on a mountain side at an altitude of 2,500' and broke up and burned on impact killing everyone aboard. When lost, this aircraft had logged a total of 14,628 hours over eight years of service before the crash.

Crashed at roughly seven miles southwest of Ukiah in Mendocino County, California. A week after the crash, the wreckage was located and the remains of the crew and passengers were recovered. The Civil Aeronautics Board (CAB) concluded the crash was due to pilot error.



NC14714 Hawaii Clipper M-130 Mar 3, 1936 - July 28, 1938

It disappeared with six passengers and nine crew en route from Guam to Manila, on July 28, 1938.

The seaplane was on a transpacific flight from San Francisco to Manila with two intermediate stops in Hawaii and Guam Island. En route, the aircraft disappeared into the ocean. SAR were conducted but eventually suspended after few days as no trace of the aircraft nor the 15 occupants was found. The seaplane was christened 'Hawaiian Clipper'.

In conclusion, it appears that the only definite facts established up to the present time, are that between 0411 and 0412 G.C.T on July 29, was a failure of communication between the ground and the Clippers. Communication was not thereafter reestablished, and that no trace of the aircraft has since been discovered. A number of theories have been advanced about the possible basic cause of or reason for the disappearance of the Clipper.

The Board has considered each of them. Some have not been disproved and some have been contradicted by the facts. However, the Investigating feels that this report cannot properly include a discussion of conjection unsupported by developed facts. The Board, therefore, respectfully submit this report with the thought that additional evidence may yet be discovered and the investigation completed at that time.

ADDENDUM



British Overseas Airways Corporation (B.O.A.C.) was the British state-owned airline created in 1939 by the merger of Imperial Airways and British Airways Ltd. It continued operating overseas services throughout World War II.

After the passing of the Civil Aviation Act 1946, European and South American services passed to two further state-owned airlines, British European Airways (BEA) and British South American Airways (BSAA).

BOAC absorbed BSAA in 1949, but BEA continued to operate British domestic and European routes for the next quarter century. A 1971 Act of Parliament merged BOAC and BEA, effective 31 March 1974, forming today's British Airways. For most of its history its main rival was Pan Am.

Boeing B-314 Flying Boats operated by BOAC



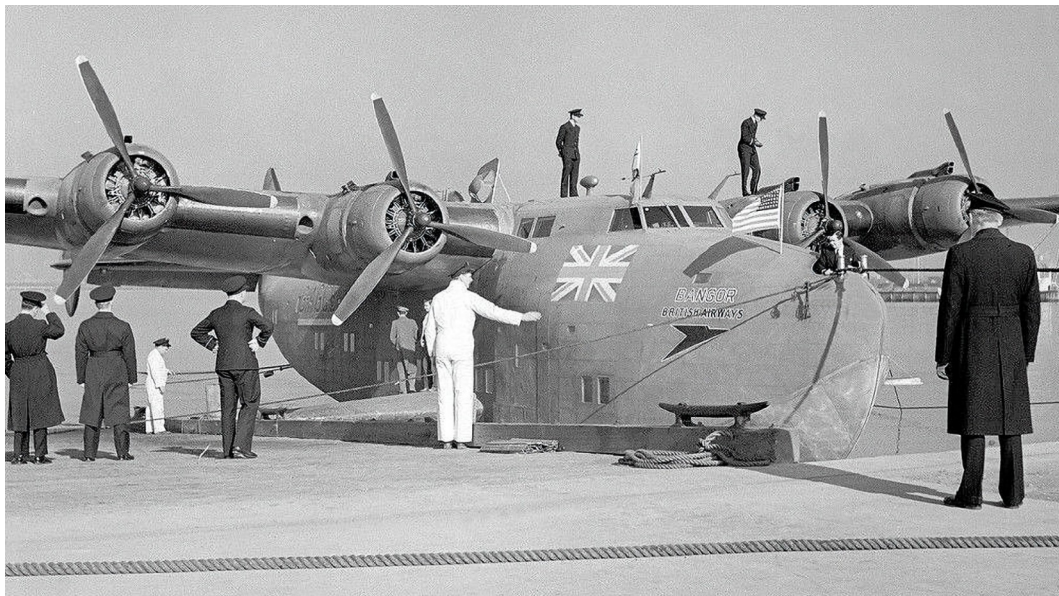
G-AGBZ 314A (#2081) **Bristol** 1941–1948 Originally NC18607, sold to General Phoenix Corporation, Baltimore as NC18607 in 1948.

The three aircraft for BOAC were withdrawn from service in 1948 and sold to Baltimore Lumber Co, having flown 6,821,795 km (4,238,867 miles) carrying 42,042 passengers. 'Berwick' was scrapped after being beached and 'Bangor' soon joined it, the metal in the aircraft producing 22,680 kg (50,000 lb) for the Tomke Aluminium Company.

In 1951 'Bristol' survived in Baltimore Harbour. Reports have stated it had been purchased at a Sheriff's sale, the new owner planning to fly the aircraft to Moscow in Russia to hold 'peace talks' with Josef Stalin. The aircraft never left Baltimore and during a sudden storm it broke free from moorings, drifted into the harbour and sank in 6.09 m (20 ft) of water after the hull was torn open.



G-AGCA 314A (#2082) **Berwick** 1941–1948 Originally NC18608, sold to General Phoenix Corporation, Baltimore as NC18608 in 1948. This aircraft flew both Winston Churchill and Lord Beaverbrook (Minister of Aircraft Production) back to the United Kingdom in mid-January, 1942 after the British Prime Minister's extended stay in the United States following Pearl Harbor. Churchill was the first head of government to make a transatlantic crossing by plane.



G-AGCB 314A (#2084) **Bangor** 1941–1948 Originally NC18610, sold to General Phoenix Corporation, Baltimore as NC18610 in 1948.

During the war, three Boeing B.314s were operated by BOAC across the Atlantic, G-AGCA Berwick, G-AGCB Bangor and G-AGBZ Bristol. Twelve in all were built, sadly none survive.

The inaugural flight was made by Capt. J.C. Kelly Rogers in Bristol on the Foynes-Lisbon-Bathurst-Lagos route on 22 May 1941. As the aircraft required very regular maintenance in Baltimore, transatlantic passenger flights via Botwood were slotted into this schedule.

For the rest of the war, the three flying boats operated this Foynes-Lagos-Baltimore circuit. In winter when Botwood was iced up, the route was from Bathurst to Baltimore via Belem in Brazil, Trinidad and Bermuda.

END – China Clipper – Floatplanes Of PanAm

Overnight to Hawaii — \$278



About the Author

Larry W Jones is a songwriter, having penned over 7,700 song lyrics. Published in 22 volumes of island themed, country, cowboy, western and bluegrass songs. The entire assemblage is the world's largest collection of lyrics written by an individual songwriter.

As a wrangler on the “Great American Horse Drive”, at age 68, he assisted in driving 800 half-wild horses 62 miles in two days, from Winter pasture grounds in far NW Colorado to the Big Gulch Ranch outside of Craig Colorado.

His book, “The Oldest Greenhorn”, chronicles the adventures and perils in earning the “Gate-to-Gate” trophy belt buckle the hard way.



Other books published by Larry W Jones:

A Squirrel Named Julie and The Fox Ridge Fox
The Painting Of A Dream
The Boy With Green Thumbs and The Wild Tree Man
Red Cloud – Chief Of the Sioux
Spotted Tail – The Orphan Negotiator
Little Crow – The Fur Trapper's Patron
Chief Gall – The Strategist
Crazy Horse – The Vision Quest Warrior
Sitting Bull - The Powder River Power
Rain-In-The-Face – The Setting Sun Brave
Two Strike – The Lakota Club Fighter
Chief American Horse – The Oglala Councilor
Chief Dull Knife – The Sharp-Witted Cheyenne
Chief Joseph – Retreat From Grande Ronde
The Oregon Trail Orphans
Kids In Bloom Volume 1
Kids In Bloom Volume 2
Kids Animal Pals Volume 1
Kids Animal Pals Volume 2
Bird Kids Volume 1
Bird Kids Volume 2
Garden Kids Volume 1
Garden Kids Volume 2
Folklore Of Jackson Hole
Henny Penny Meets Chicken Little
Delightful Stories For Children
The 1825 Voyage Of HMS Blonde
Illustrated Stories For Young Children
Sea Sagas – Perilous Voyages
Songbirds And Their Stories

Other books published by Larry W Jones:

The Jungle Book – Mowgli’s Brothers
The Jungle Book – Kaa’s Hunting
The Jungle Book – Tiger! Tiger!
The Jungle Book – The White Seal
The Jungle Book – Rikki-Tikki-Tavi
The Jungle Book – Toomai of the Elephants
The Jungle Book – Her Majesty’s Servants
The Oldest Greenhorn – Second Edition
Life On The Mississippi
Songs Of The Seas
Treasure Island
The Wind In The Willows
Alice In Wonderland
Peter Rabbit
The Secret Garden
Heidi
Cynthia Ann Parker – Comanche Bride
Black Beauty
The Call Of the Wild
Uncle Remus and Brer Rabbit
Twenty Thousand Leagues Under the Sea
The Goodnight-Loving Trail – A Chuckwagon Saga
Ode To Toulee – From Gosling To Goose

All his publications are available on Lulu.com